

Fig. 1

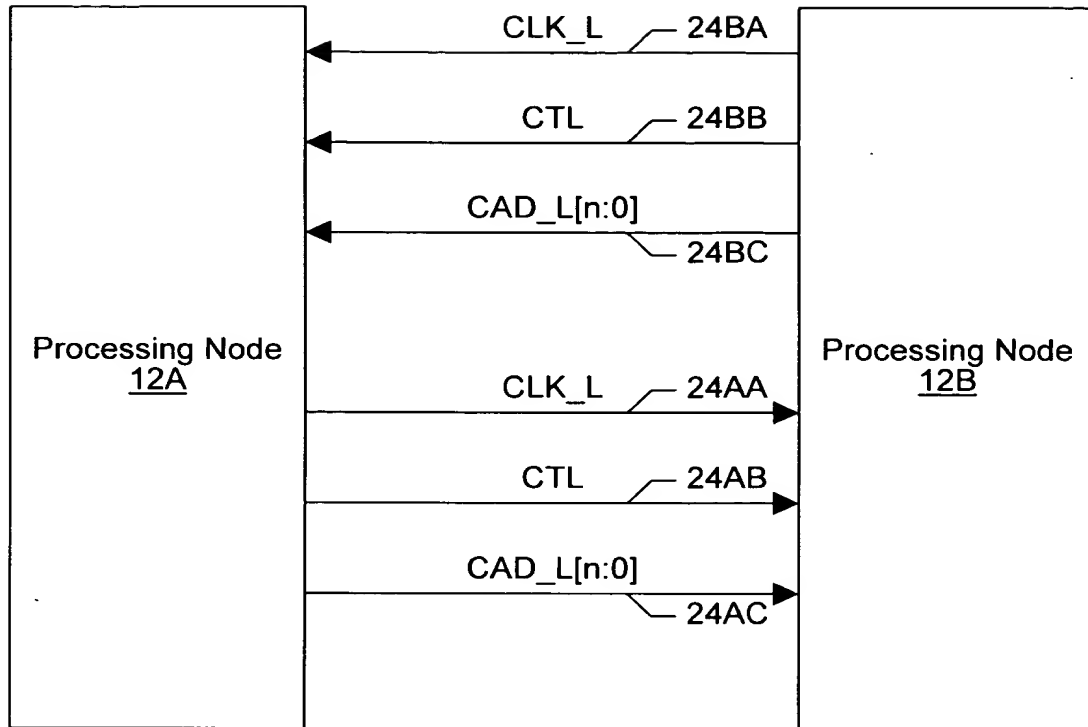


Fig. 2

Bit Time	7	6	5	4	3	2	1	0
1			CMD[5:0]					
2								
3								
4								


30 

Fig. 3

Bit Time	7	6	5	4	3	2	1	0
1	SrcUnit [1:0]		CMD[5:0]					
2	DestNode [2:0]			DestUnit [1:0]		SrcNode[2:0]		
3				SrcTag[4:0]				
4								
5	Addr[15:8]							
6	Addr[23:16]							
7	Addr[31:24]							
8	Addr[39:32]							


32 

Fig. 4

Bit Time	7	6	5	4	3	2	1	0
1	SrcUnit [1:0]		CMD[5:0]					
2	DestNode [2:0]			DestUnit [1:0]		SrcNode[2:0]		
3				SrcTag[4:0]				
4	Sh							

34

Fig. 5

Bit Time	7	6	5	4	3	2	1	0
1	Data[7:0]							
2	Data[15:8]							
3	Data[23:16]							
4	Data[31:24]							
5	Data[39:32]							
6	Data[47:40]							
7	Data[55:48]							
8	Data[63:56]							

36

Fig. 6

<u>CMD Code</u>	<u>VChan</u>	<u>Command</u>	<u>Packet Type</u>
000000	-	Nop	Info
000001	NPC	VicBlk	Command/Data
000010		Reserved	
000011	NPC	ValidateBlk	Command
000100	NPC	RdBlk	Command
000101	NPC	RdBlkS	Command
000110	NPC	RdBlkMod	Command
000111	NPC	ChangetoDirty	Command
x01xxx	NPC or PC	WrSized	Command/Data
01xxxx	NPC	ReadSized	Command
100xxx		Reserved	
110000	R	RdResponse	Response/Data
110001	R	ProbeResp	Response
110010	R	TgtStart	Response
110011	R	TgtDone	Response
110100	R	SrcDone	Response
110101	R	MemCancel	Response
11011x		Reserved	
11100x	P	Probe	Command
111010	P	Broadcast	Command
111011		Reserved	
11110x		Reserved	
111110		Reserved	
111111	-	Sync	Info

Fig. 7

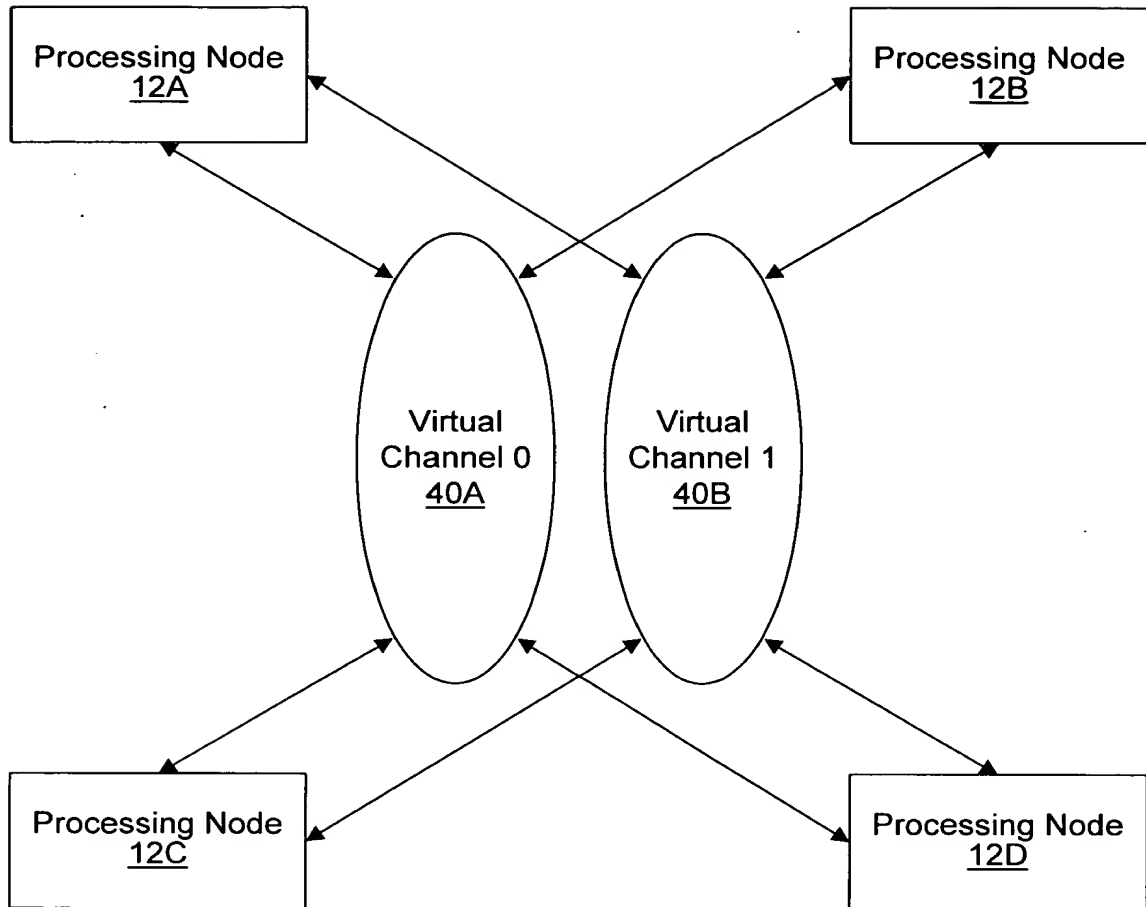


Fig. 8

Virtual Channels

<u>Virtual Channel</u>	<u>Applicable Links</u>
Posted Commands	Coherent and NonCoherent
Non-Posted Commands	Coherent and NonCoherent
Responses	Coherent and NonCoherent
Probes	Coherent Only

42



Fig. 9

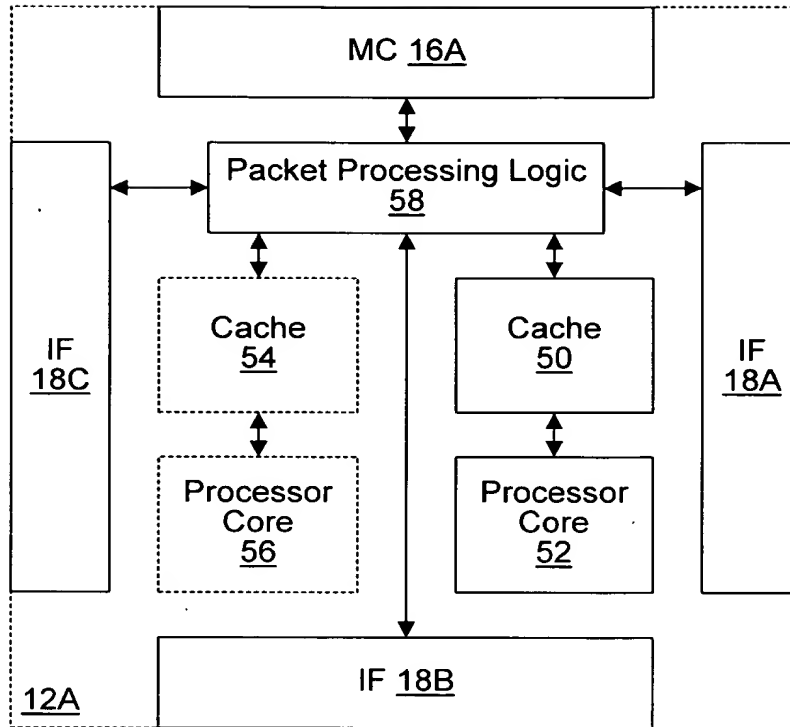
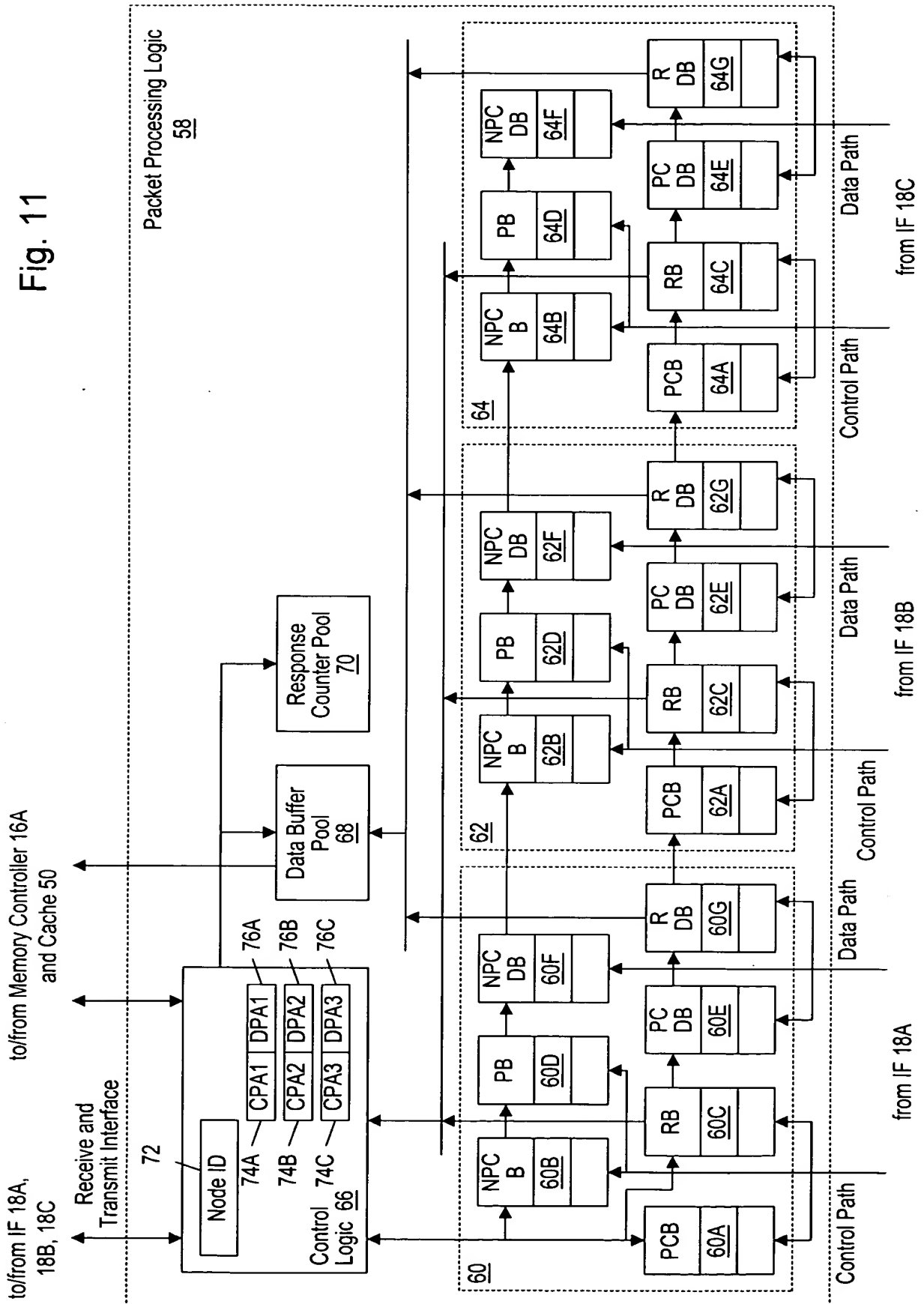


Fig. 10

Fig. 11



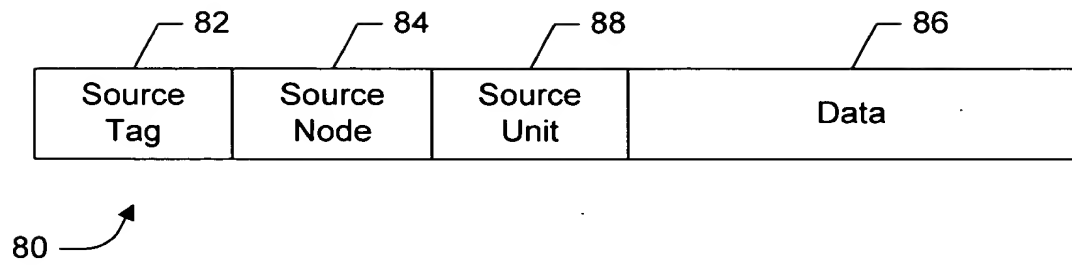


Fig. 12

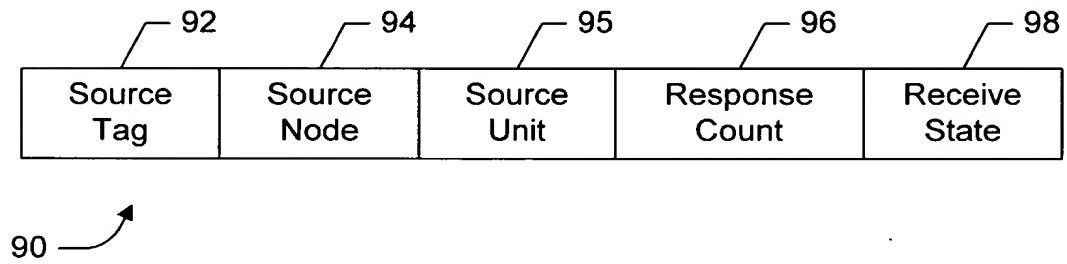


Fig. 13

11/24

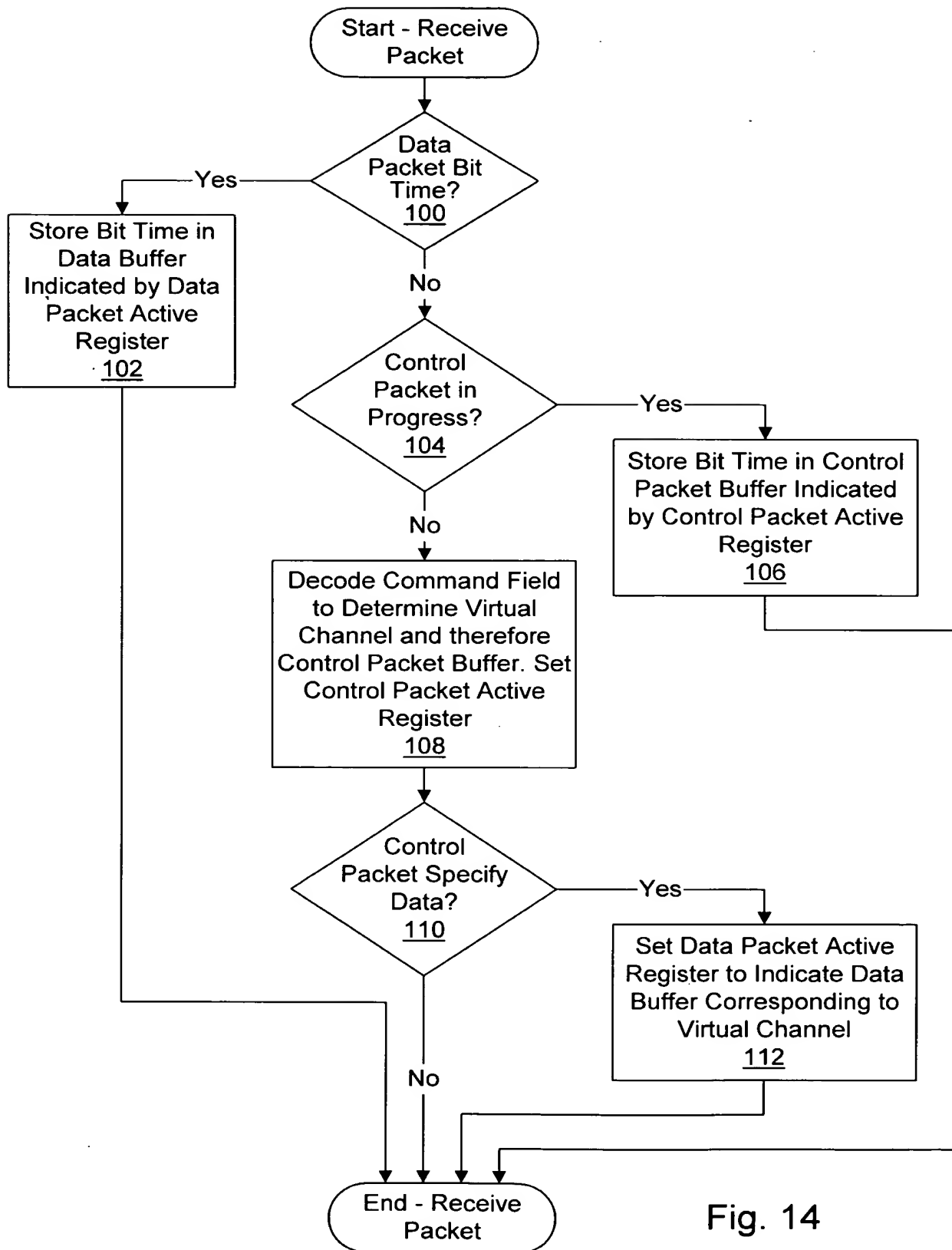


Fig. 14

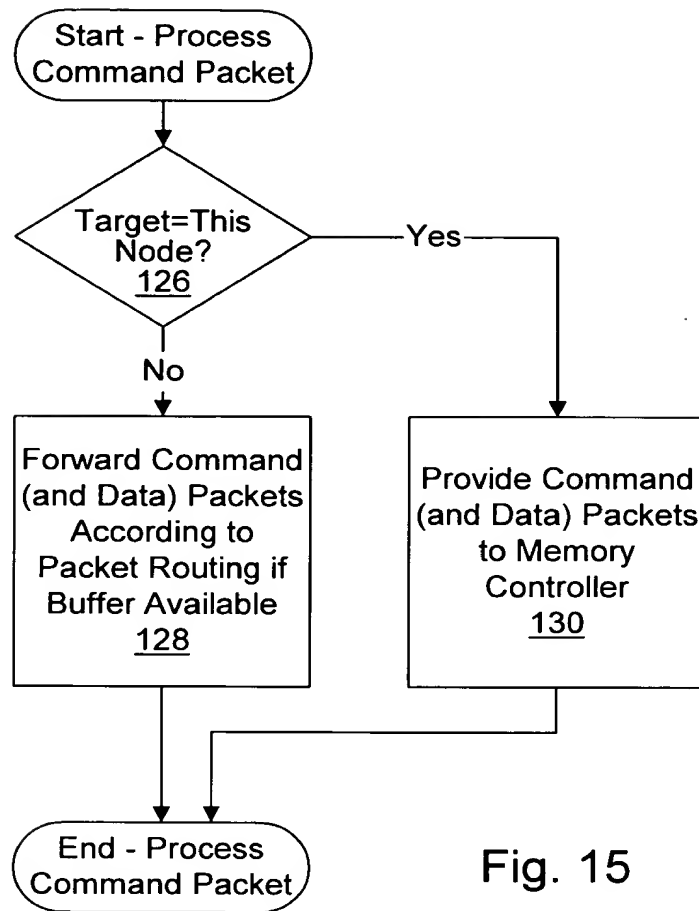


Fig. 15

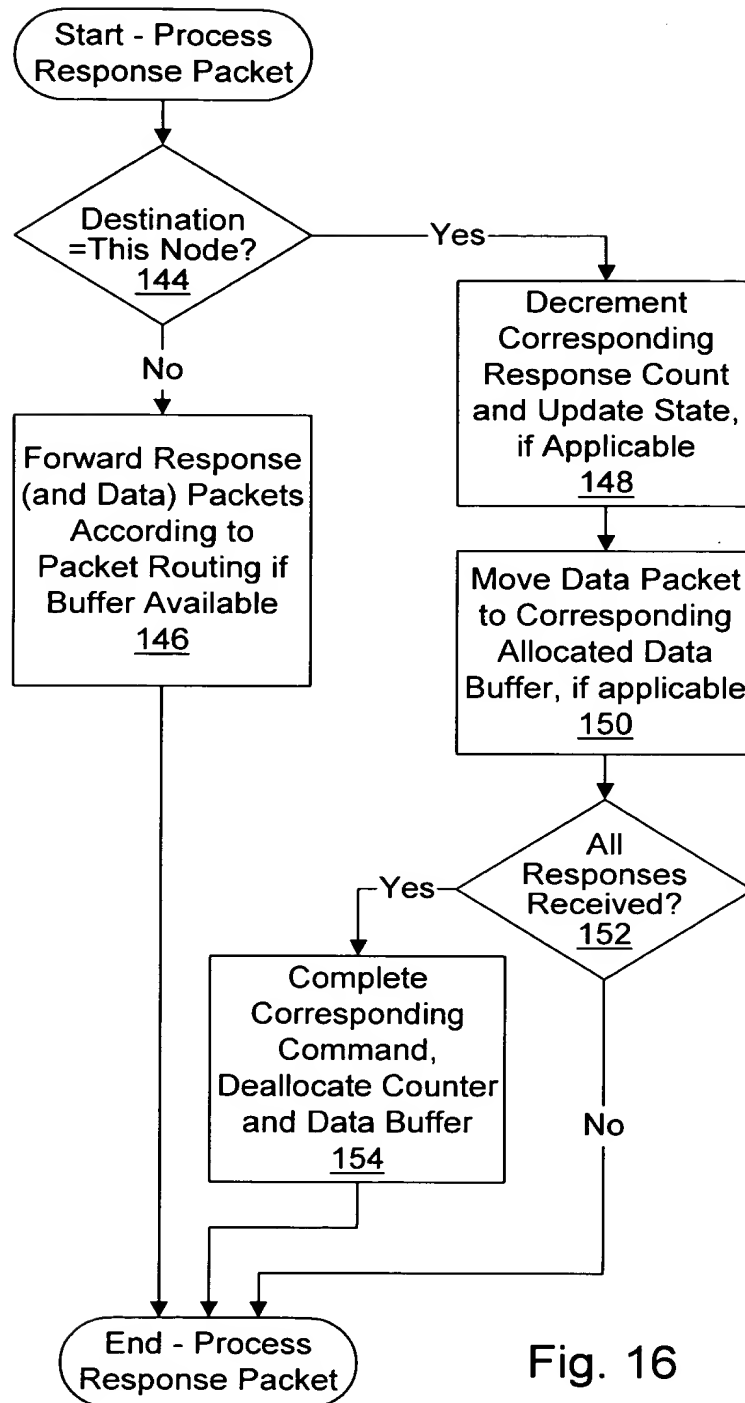


Fig. 16

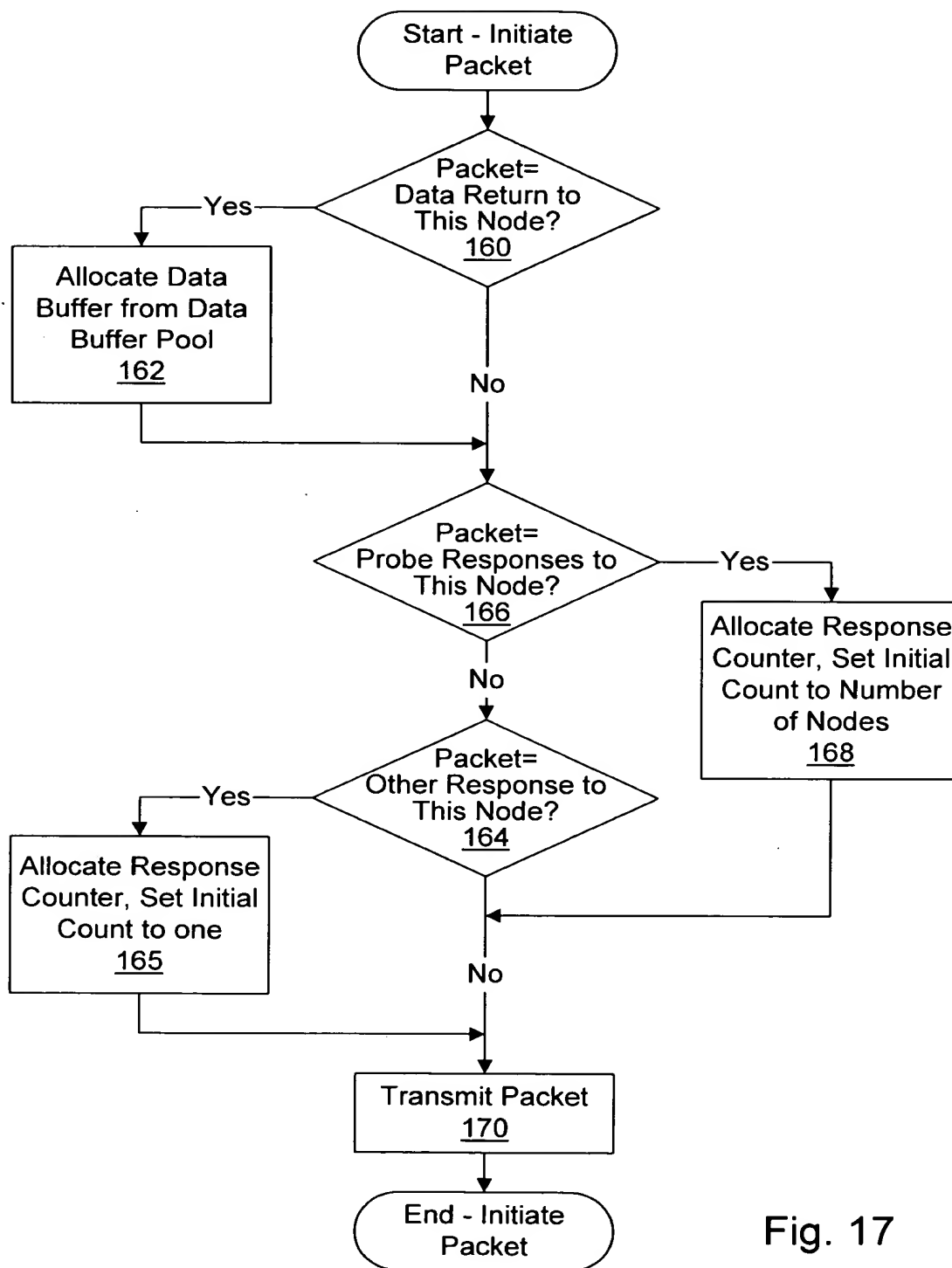


Fig. 17

Bit Time	7	6	5	4	3	2	1	0
1	RSV		CMD[5:0]					
2	RespData [1:0]		Response [1:0]		PostCmd Data[1:0]		PostCmd [1:0]	
3	RSV		Probe [1:0]		NonPost Data[1:0]		NonPost Cmd[1:0]	
4	RSV							


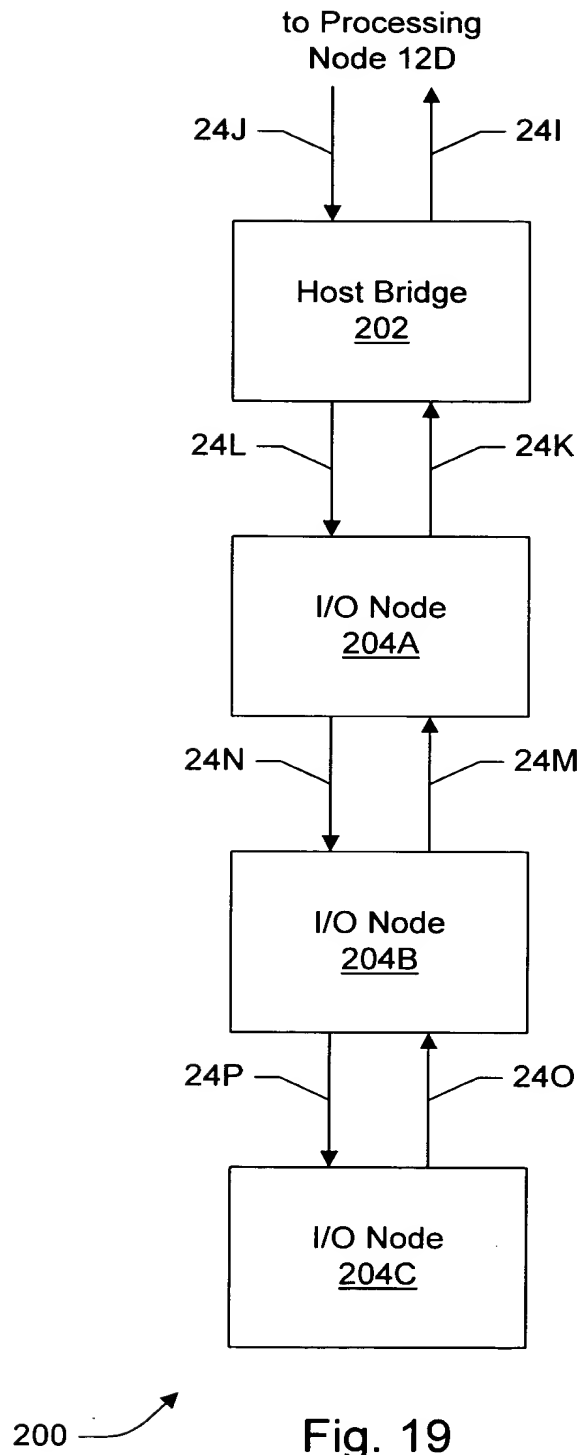
180 

Fig. 18



<u>CMD Code</u>	<u>VChan</u>	<u>Command</u>	<u>Packet Type</u>
000000	-	Nop	Info
000001		Reserved	
000010	NPC	Flush	Command
000011		Reserved	
0001xx		Reserved	
x01xxx	NPC or PC	WrSized	Command/Data
01xxxx	NPC	ReadSized	Command
100xxx		Reserved	
110000	R	RdResponse	Response/Data
110001		Reserved	
110010		Reserved	
110011	R	TgtDone	Response
11010x		Reserved	
110110		Reserved	
110111	R	AssignAck	Response
11100x		Reserved	
111010	PC	Broadcast	Command
111011		Reserved	
11110x		Reserved	
111110	-	Assign	Info
111111	-	Sync	Info


210 

Fig. 20

Bit Time	7	6	5	4	3	2	1	0
1	SeqID[3:2]		CMD[5:0]					
2	Pass PW	SeqID[1:0]		UnitID[4:0]				
3				SrcTag[4:0]				
4								
5	Addr[15:8]							
6	Addr[23:16]							
7	Addr[31:24]							
8	Addr[39:32]							

212  Fig. 21

Bit Time	7	6	5	4	3	2	1	0
1			CMD[5:0]					
2	Pass PW			UnitID[4:0]				
3				SrcTag[4:0]				
4								

214  Fig. 22

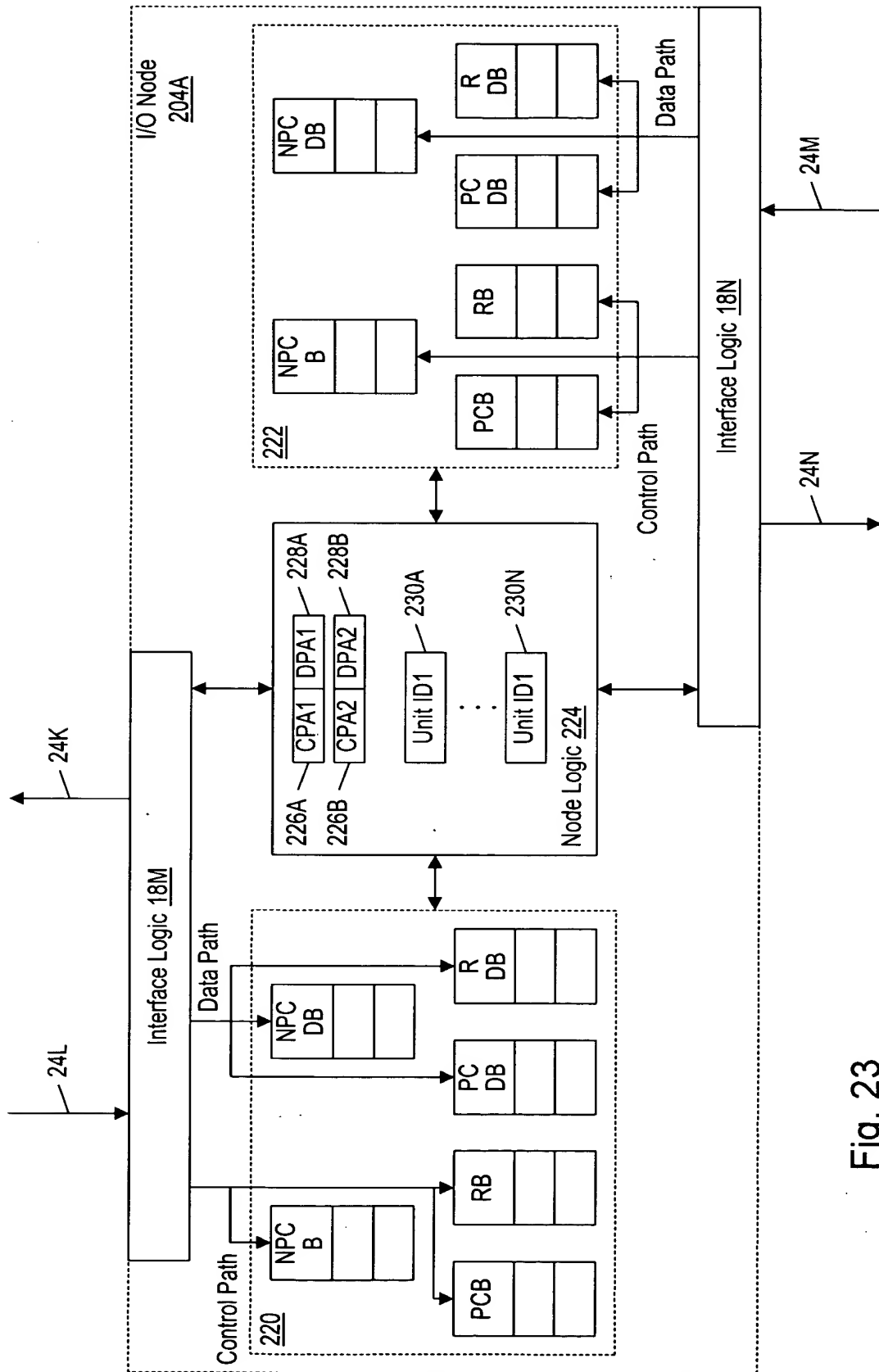


Fig. 23

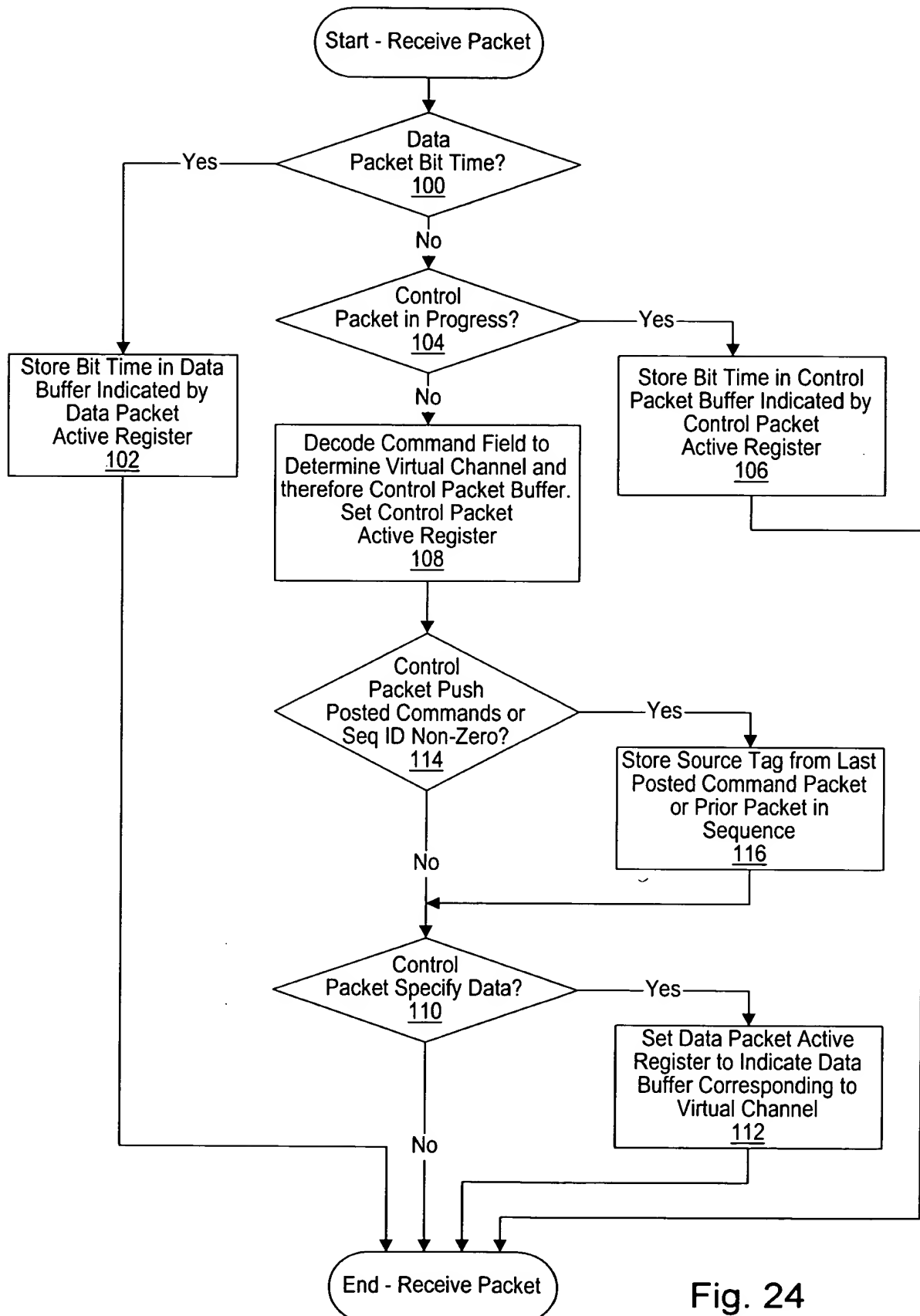


Fig. 24

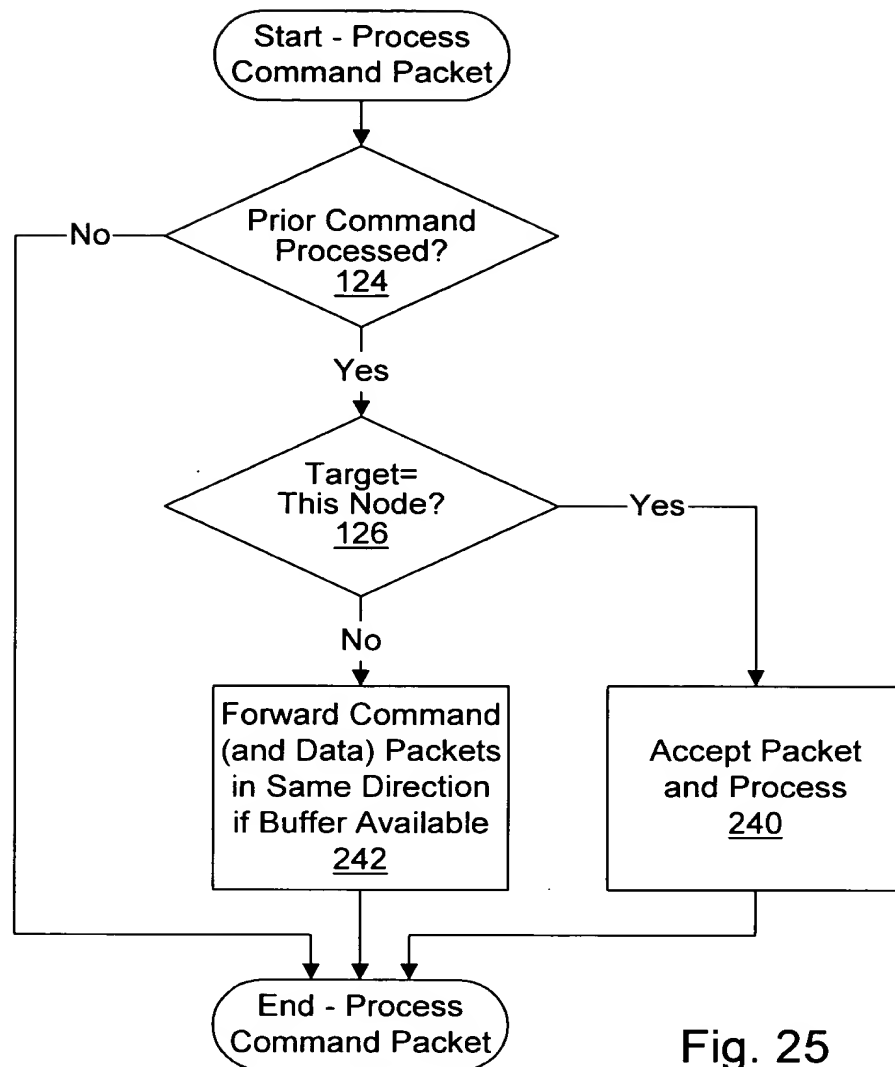


Fig. 25

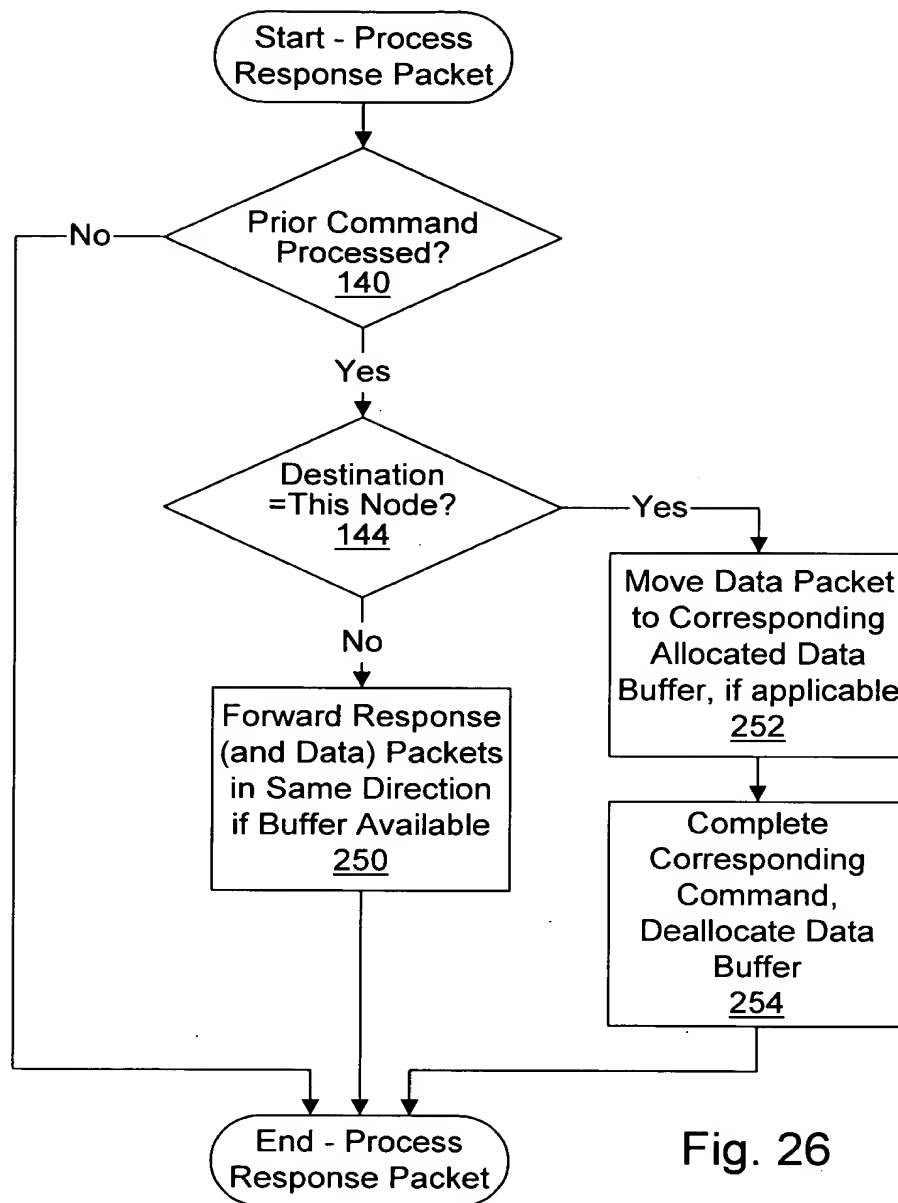


Fig. 26

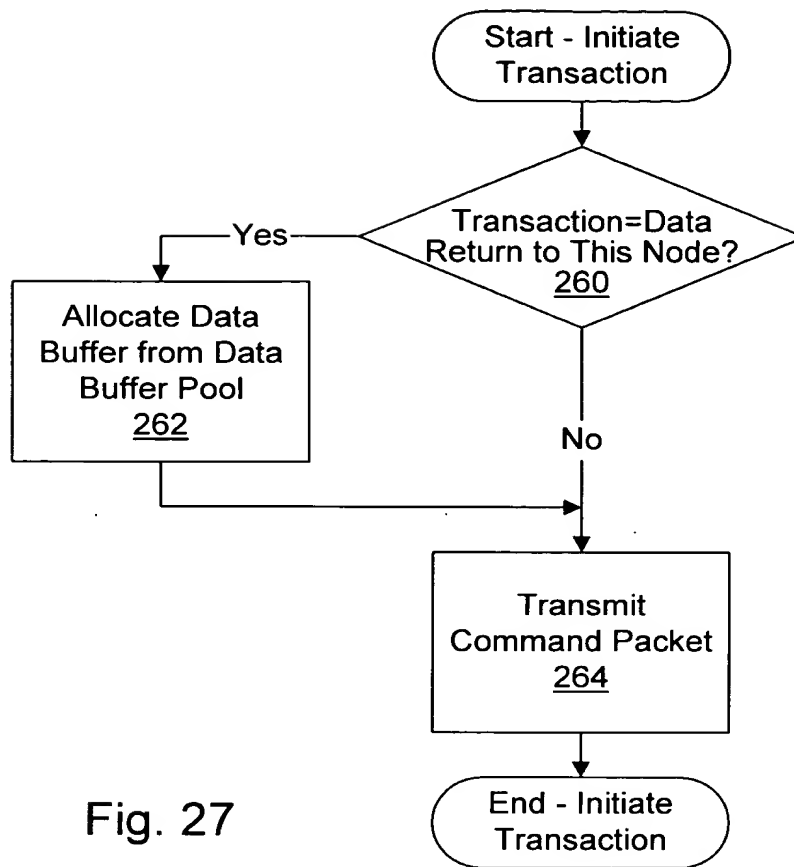


Fig. 27

272

274

First Command (CMD ₁)	Second Command (CMD ₂)	Wait Requirements
Memory Write	Memory Write	1. CMD ₂ waits for TgtStart ₁ 2. SrcDone ₂ waits for TgtDone ₁ 3. TgtDone ₂ on Noncoherent Link waits for TgtDone ₁ on Coherent Link
Memory Write	Memory Read	1. CMD ₂ waits for TgtStart ₁ 2. RdResponse ₂ on Noncoherent Link waits for TgtDone ₁ on Coherent Link
Memory Read	Any Memory	CMD ₂ waits for TgtStart ₁
Memory Write	I/O or Interrupt	CMD ₂ waits for TgtDone ₁
Memory Read	Any I/O	CMD ₂ waits for TgtStart ₁
Memory Write	Flush	TgtDone ₂ on the Noncoherent Link waits for TgtDone ₁ on the Coherent Link
Memory Write	Response	Response ₂ waits for TgtDone ₁
Memory Read	Response	Response ₂ waits for TgtStart ₁
Any I/O	Any Memory, any I/O, or Interrupt	CMD ₂ waits for TgtStart ₁
Any I/O	Flush	TgtDone ₂ on the Noncoherent Link waits for TgtStart ₁ on the Coherent Link
Any I/O	Response	Response ₂ waits for TgtStart ₁
Interrupt Broadcast, Low Priority	Interrupt Broadcast	CMD ₂ waits for RdResponse ₁
SysMgt Write	Response	Response ₂ waits for TgtDone ₁

Fig. 28

270